

**ROUTING MEDICAL IMAGES WITHIN A COMPUTER NETWORK****ABSTRACT**

A router includes a computer-readable medium storing routing information mapping destinations to routes within a medical imaging network, and storing a set of routing rules. A routing module executing within an operating environment provided by the router selects a route from the routing information based on destination information of a network communication and a comparison of medical imaging data of the network communication to the set of routing rules. The module parses the medical imaging data to identify a set of DICOM tags and corresponding data; and assesses the routing rules based on the DICOM tags and corresponding data.